

REMARKS

Applicant, by the amendments presented above, has made a concerted effort to present claims which more clearly define over the prior art of record, and thus to place this case in condition for allowance.

Currently, claims 1-12 and 21-30 are pending. Claims 13-20 have been canceled. Claims 9, 10 and 22-30 have been allowed.

Claims 1-8, 11, 12 and 21 were rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 6,079,986 to Beshears in view of United States Patent No. 5,120,258 to Carlton. Reconsideration of the rejection in view of the remarks provided herein is requested.

In Beshears, the Examiner has defined the main body of the plug as defined in claim 1 as elements 14 and 60, and the Examiner has also defined the receptacle as defined in claim 1 as element 14. As an initial matter, Applicant submits that element 14 (which is a printed circuit board), cannot be defined as both the main body of the plug as defined in claim 1 and the receptacle as defined in claim 1. Applicant has thoroughly studied Beshears in an attempt to reconcile how element 14 could be both the plug and the receptacle within the limits of claim 1 and Applicant was not able to reach that conclusion. Applicant does admit, however, that element 60 can be defined as the main body of the plug, elements 50 and 74 can be defined as the ground contacts, and element 14 can be defined as the receptacle.

Claim 1 has been amended to clarify the claim language and states "said coaxial receptacle being electrically connected to the coaxial plug by inserting respective terminals into respective cavities, each said terminal terminating within said respective cavity such that each said terminal does not extend beyond an end of said housing". This amendment was

made to clarify that each respective terminal is inserted into a respective cavity in the receptacle such that an electrical connection is provided between the terminal and the receptacle. Applicant contends that the claim language conveyed this prior to this amendment, however, to ensure that the claim language is clear, the present amendment was made. Applicant submits that this amendment does not necessitate a new search or present further issues for consideration.

In Beshears, the signal terminal 42/72 is electrically isolated from receptacle 14 by insulator 60. Signal terminal 42/72 and insulator 60 pass through receptacle 14 such that electrical continuity is provided between printed circuit board 16, signal terminal 42/72, signal contact 22 and printed circuit board 12. Therefore, signal terminal 42/72 does not enter into a cavity within receptacle 14 such that an electrical connection is provided between the signal terminal 42/72 and the receptacle 14. Moreover, Applicant submits that it would not be obvious to one of ordinary skill in the art to electrically connect signal terminal 42/72 to printed circuit board 14. The purpose of Beshears is to provide a coaxial connector which stacks three printed circuit boards. If signal terminal 42/72 were terminated onto printed circuit board 14, the purpose of Beshears would be overcome. Therefore, Beshears teaches away from terminating signal contact 42/72 onto printed circuit board 14. Thus, Beshears does not terminate each of the terminals within cavities in the housing of the receptacle as is specified in claim 1.

Claim 1 further specifies “each said terminal terminating within said respective cavity such that each said terminal does not extend beyond an end of said housing”. Carlton does not teach or suggest terminating the terminals within the cavities as is contended by the Examiner. In Col. 2, lines 50-51, Carlton discloses that holes 48 are “plated-through holes” which receive the pins 14 and in line 61, Carlton discloses that hole 54 is a “plated-through

hole” which receives pin 16. Carlton does not specify in the description whether the terminals terminate within the cavities in printed circuit board 42 for the embodiment shown in Figure 2, however, when the length of the pins 14 is measured with a ruler and the combined lengths of the layer 22 and the printed circuit board 40, the length of the pins 14 is longer than the combined lengths of the layer 22 and the printed circuit board 40. As such, the pins 14 would extend outwardly from the board 40. In addition, in the embodiment shown in Figure 1, the pins 81, 83 extend through the printed circuit board 85 and protrude outwardly therefrom. Thus, there is no teaching in Carlton that the “each said terminal terminating within said respective cavity such that each said terminal does not extend beyond an end of said housing” as is specified in claim 1.

Finally, claim 1 specifies “a coaxial plug provided at an end of a cable”. Applicant submits that it would not be obvious in view of Carlton to modify Beshears to provide the plug 40 at an end of a cable. Again, the purpose of Beshears is to provide a coaxial connector which stacks three printed circuit boards. If the plug 40 were connected to a cable as suggested by the Examiner (Applicant assumes that the Examiner means that a cable would be substituted for the elements on the right hand side of Figure 13, for example), the coaxial connector would not be used to stack three printed circuit boards. As such, the purpose of Beshears would be overcome. Therefore, Beshears teaches away from providing a cable attached to plug 40.

For the foregoing reasons, Applicant submits that amended claim 1 is allowable over the cited combination. Reconsideration and allowance is requested.

Claims 2-8, 11, 12 and 21 are dependent upon claim 1 which Applicant submits is in condition for allowance. Reconsideration and allowance of claims 2-8, 11, 12 and 21 is requested.

Claim 22 specifies that the surface of the plug main body is planar. Assuming that the Examiner can define elements 14 and 60 of Beshears as the plug main body (which definition Applicant contests), there is no suggestion for making the surfaces of elements 14 and 60 planar as suggested by Carlton. Element 60 is an insulator which surrounds the signal terminal 42/72 to electrically isolate it from printed circuit board 14. If the insulator 60 were shortened to be co-planar with printed circuit board 14, a substantial portion of signal terminal 42/72 would be left uninsulated and the signal that is passed therethrough would be subject to interference. There is no suggestion to shorten the insulator 60 absent the use of hindsight after reading the disclosure of Applicant's invention. If the printed circuit board 14 was enlarged to make the surface co-planar with end of the insulator 60, the printed circuit board 14 would abut against printed circuit board 16 and would be subject to interference therefrom. There is no suggestion to enlarge the printed circuit board 14 absent the use of hindsight after reading the disclosure of Applicant's invention. Therefore, Applicant submits that claim 22 is not rendered obvious by the prior art and reconsideration is requested.

If the Examiner is of the opinion that foregoing remarks do not place the application in condition for allowance, entry of same is requested for purposes of appeal.

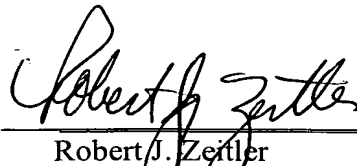
Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact the undersigned attorney.

Respectfully submitted,

MOLEX INCORPORATED

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By: _____



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